

# PHENIX WEEKLY PLANNING



Jan. 9, 2014  
Don Lynch

## This Week

TECHNICAL REPORT NO-14

- Finish evaluation of VTX leaking fitting
- VTX/FVTX electronics commissioning
- Finish EC hookup, platforms lowered and dumbwaiter installed & prep for run
- Continue Pink Sheets
- Move MMS to run position
- Install MuID Collars
- Build shield wall and install plug door
- Start watch shifts
- Start white sheets and blue sheets
- Continue sPHENIX support
  - HCal prototype assembly & operational tests
  - Install light tight box
  - EMCal prototype assembly & operational tests
- Future IR evolution modeling

Done  
In Progress

Done

Done  
Done  
Done  
Done  
In progress  
In progress



1/9/2014

## Next Week

- Finish Pink/White/Blue Sheets
- Build MPC-Ex FEM installation platform
- Install MPC-Ex FEM
- Continue F/VTX commissioning
- Prepare for start of flammable gas
- Finish sPHENIX Prototype assembly and operational tests and prep for shipment to FermiLab
- End of Shutdown Party (Lunch time Friday 1/17)

## DC East & West Repairs Summary of Tasks

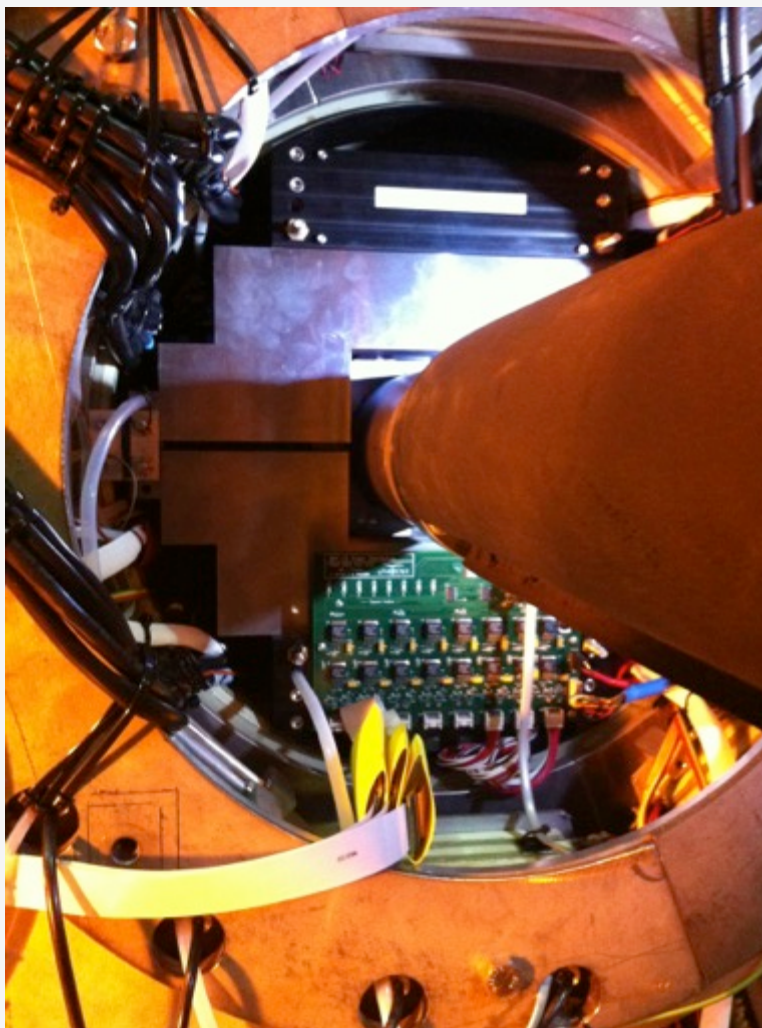
- DC West broken wire removal -



WEST - BROKEN WIRE - NORTH

## MPC-Ex Initial (Partial) Installation

PHENIX - PROGRESS REPORT - NOV 4



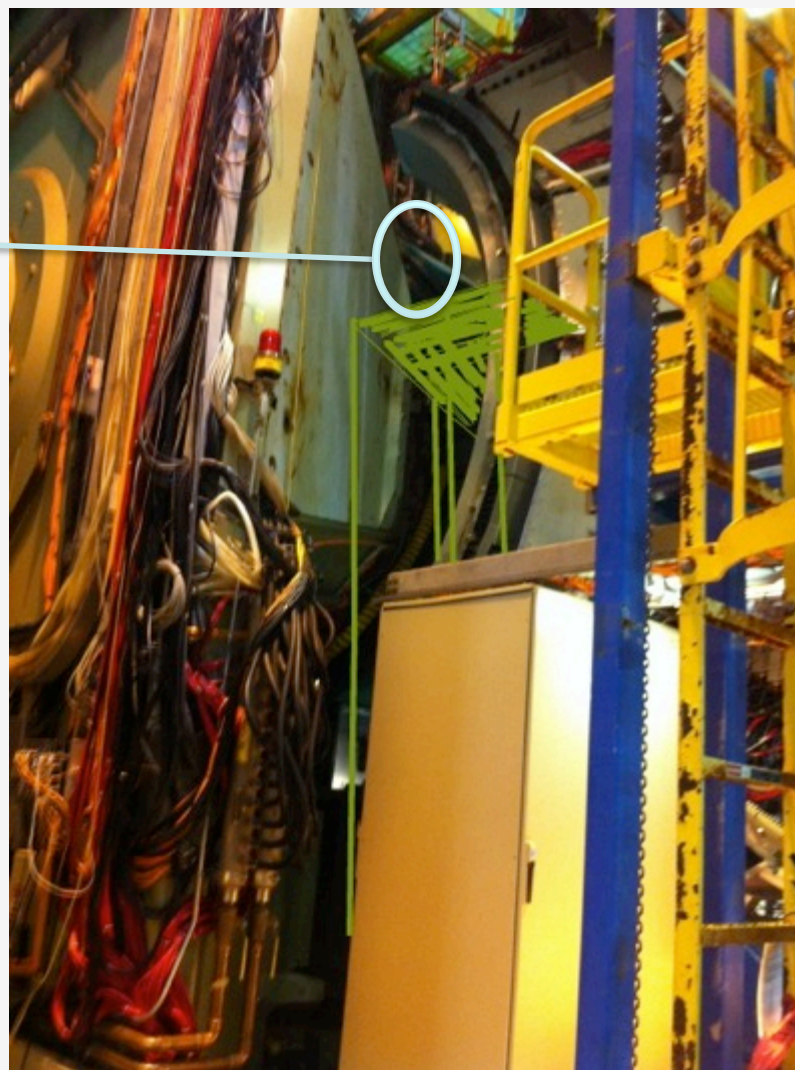
Mechanical installation complete  
Services connected  
Rack assembly & FEM assembly in progress

1/9/2014



Need a custom  
Scaffold platform to install  
FEM boxes in this area

Scaffold to use standard 5 - 6  
ft long planks with safety rails  
and kick plates supported by  
unistrut legs cross braced .  
Access from mid EC platform



2 5'-6' platforms in an "L" shape to  
access from the EC midlevel platform

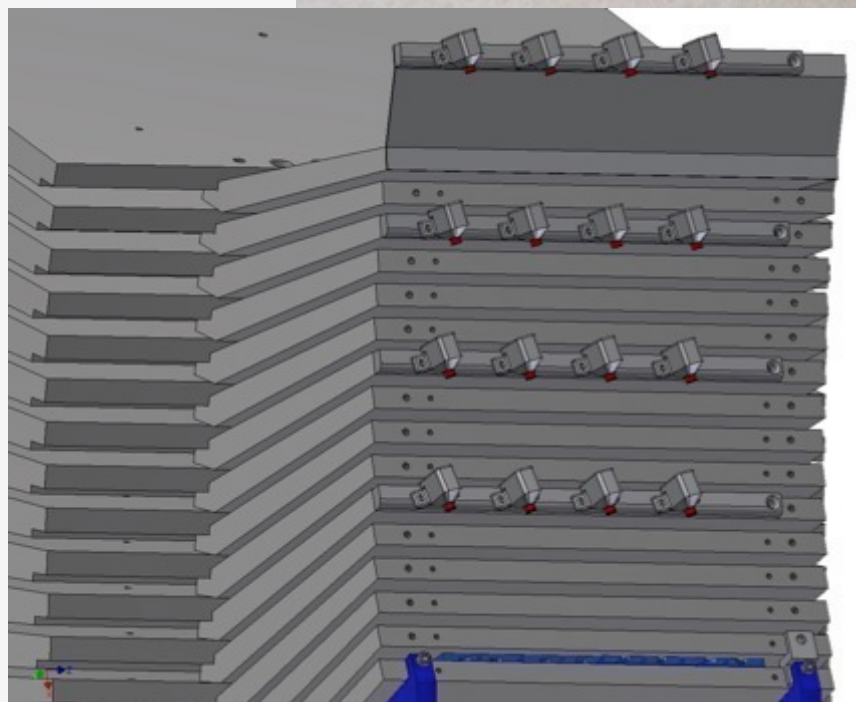
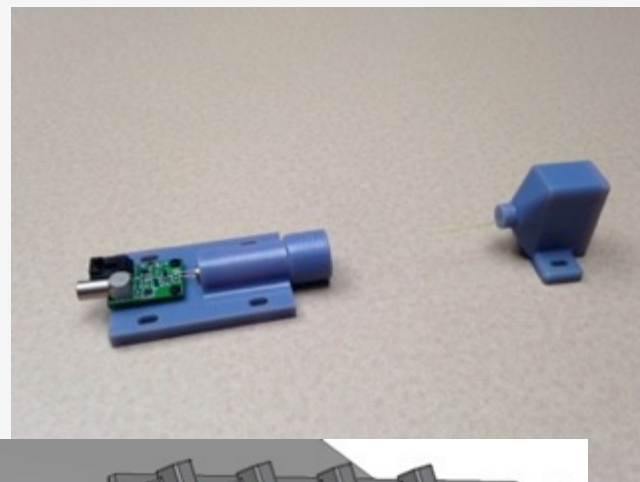
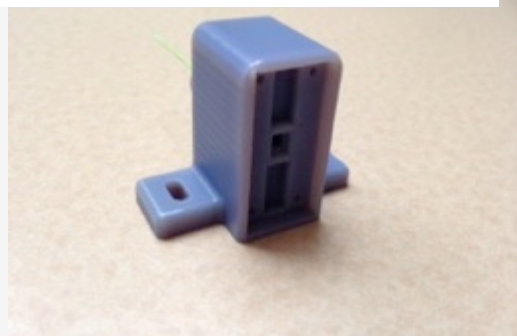
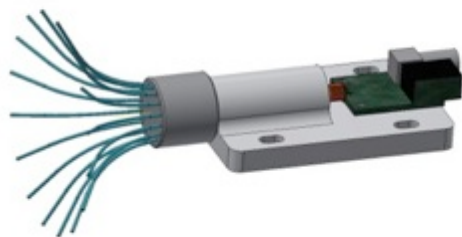


1/8/2014

January 2014 DC  
Meeting

# Light Collection for HCal

sPHENIX



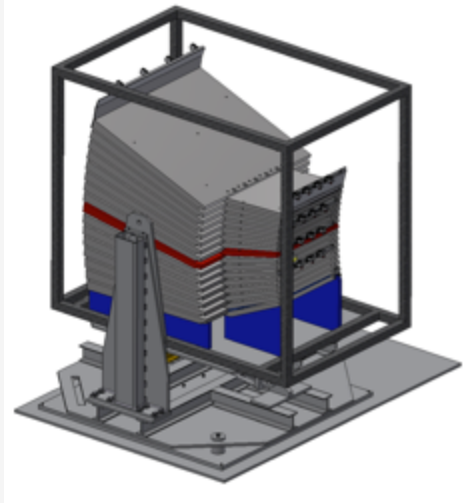
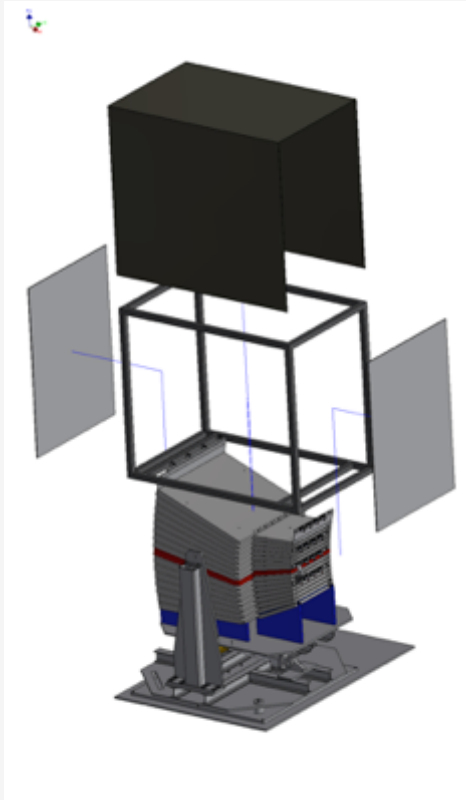
12/26/2013-1/2/2014



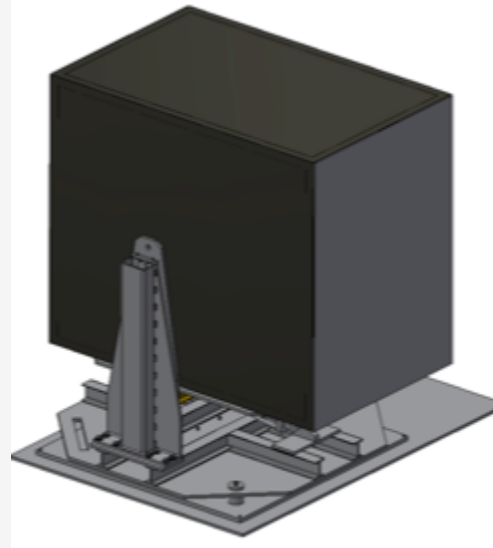
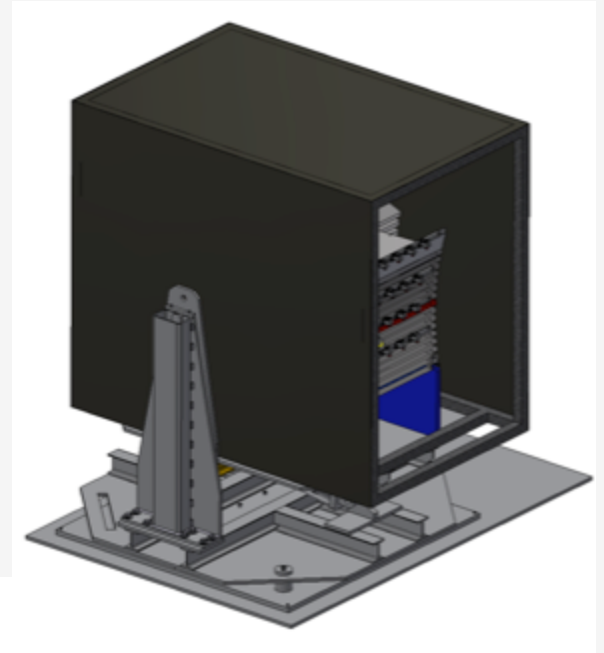


1/8/2014

January 2014 DG  
Meeting

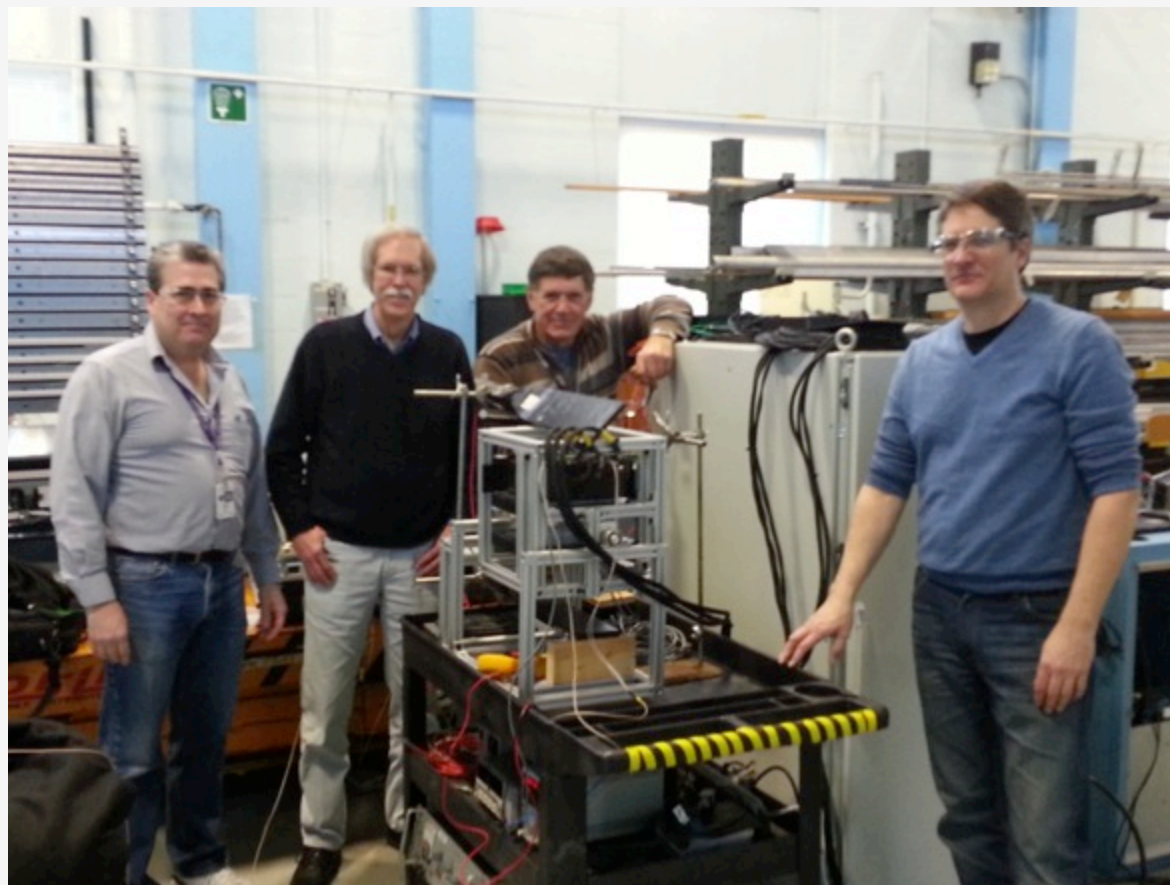


Hcal Light-Tight Enclosure



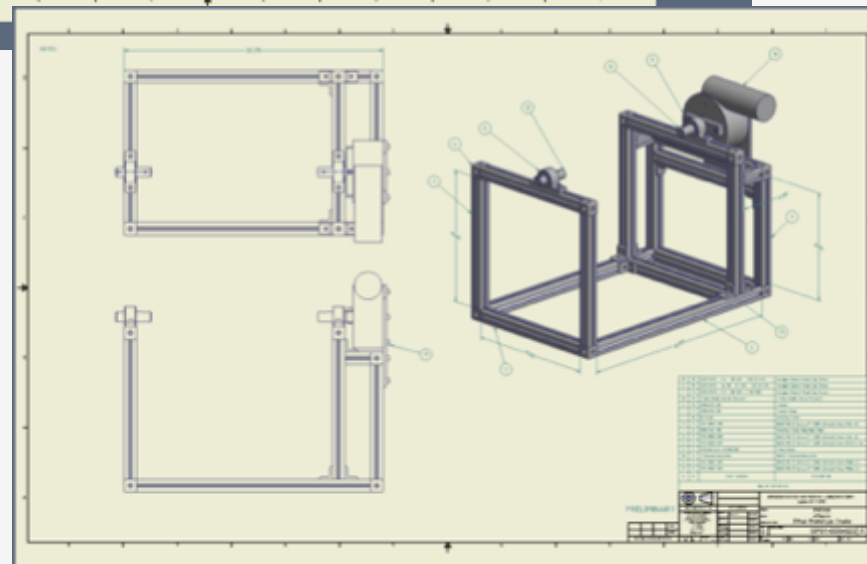
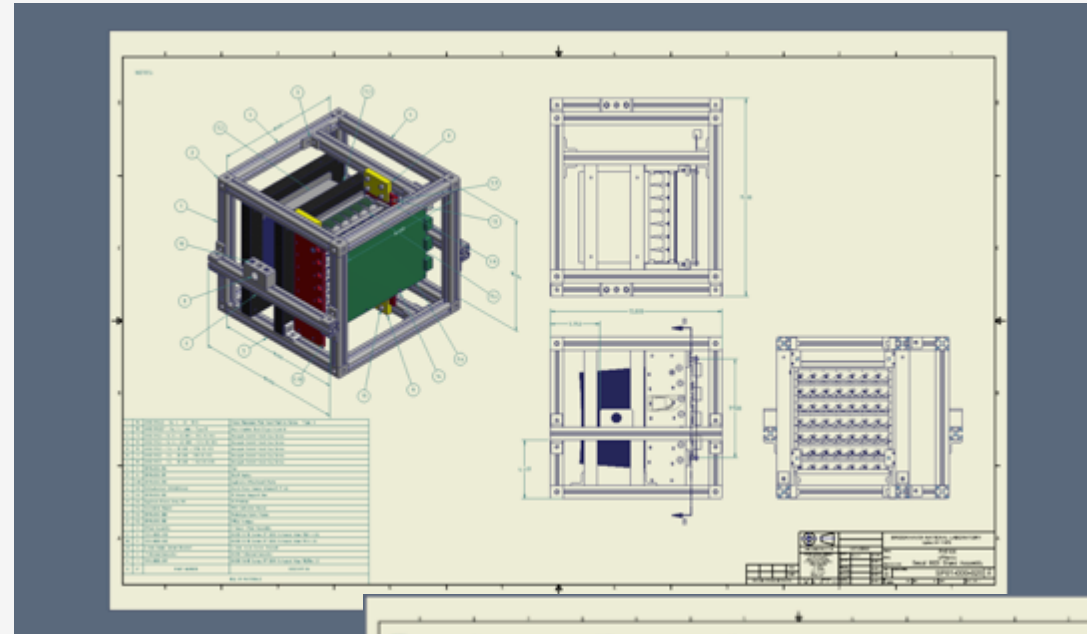
12/26/2013-1/2/2014

## EMCal Ready for Testing



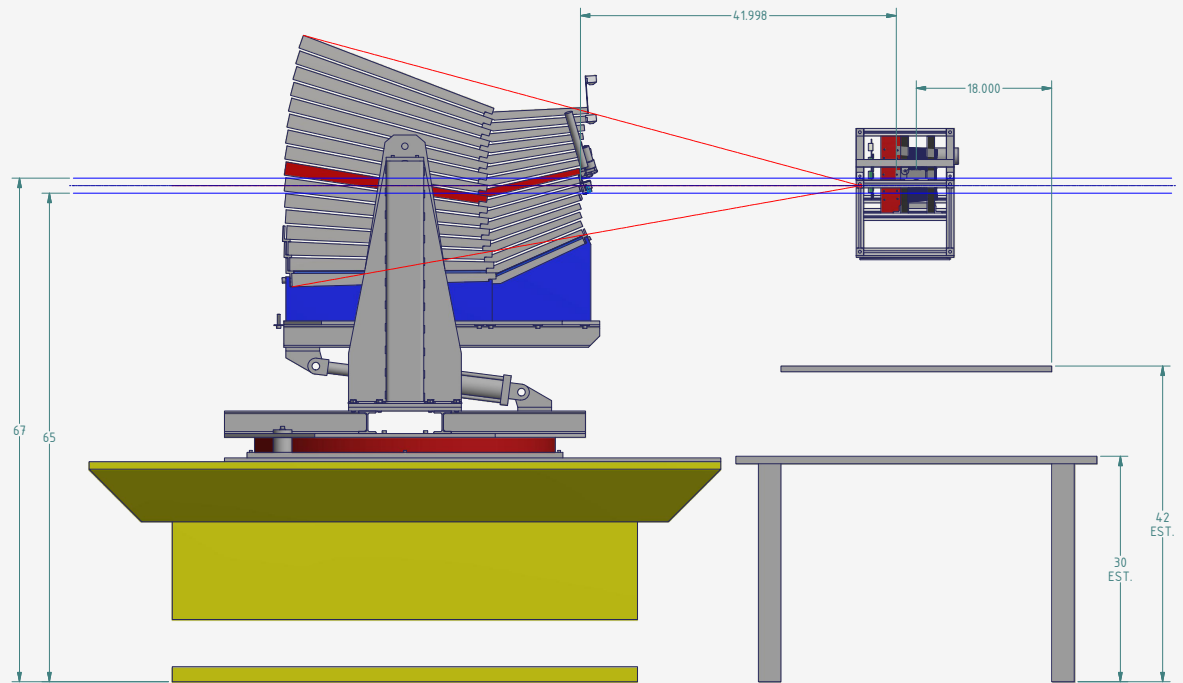
12/26/2013-1/2/2014

## EMCal Support



12/26/2013-1/2/2014





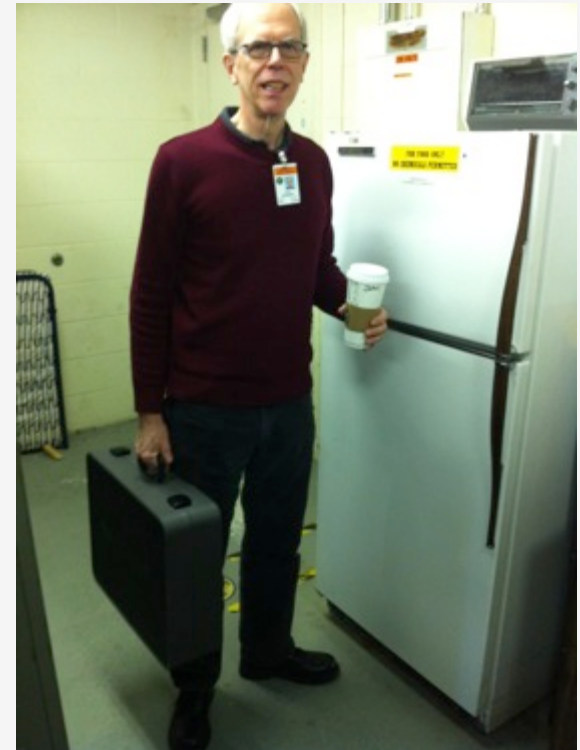
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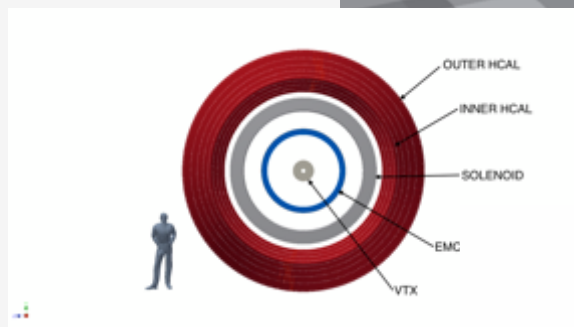
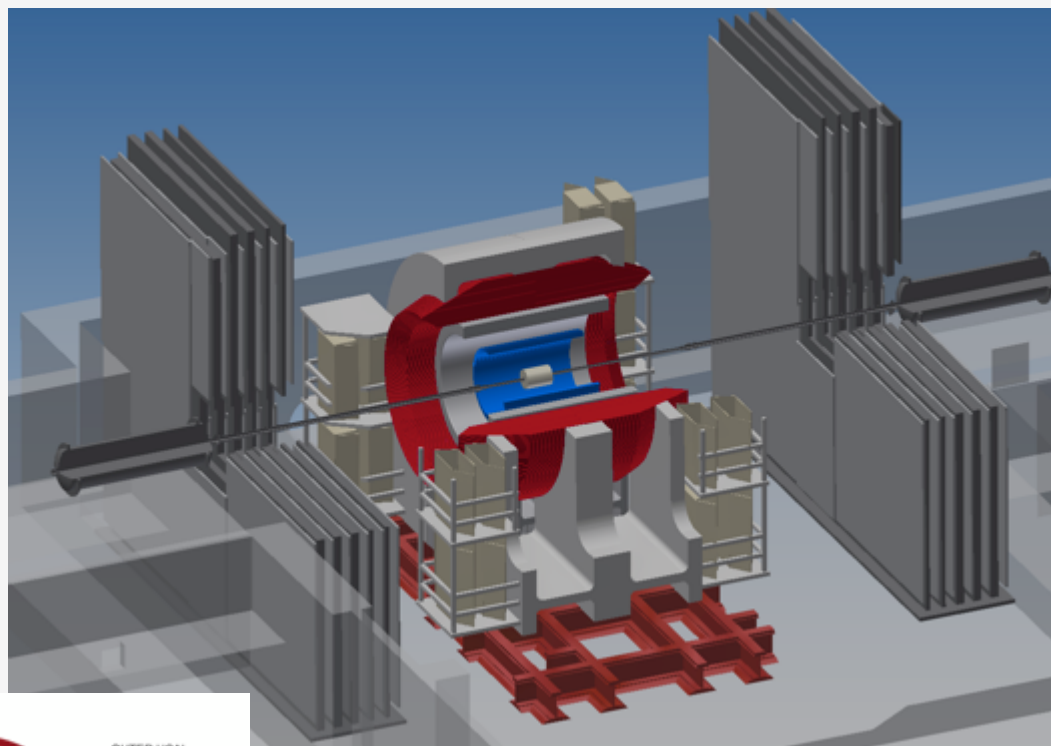
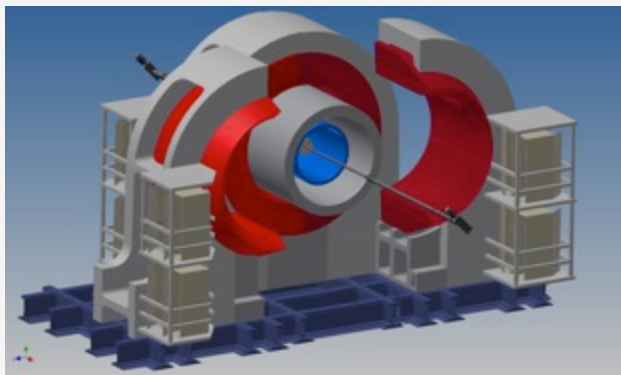


sPHENIX Prototypes:

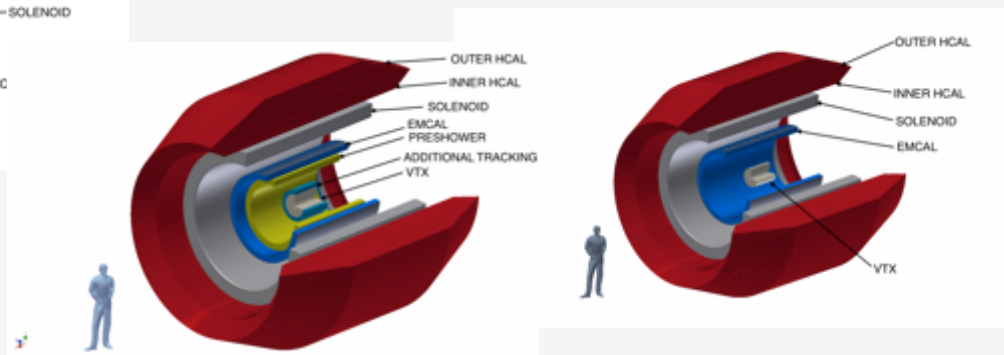
Almost ready for FermiLab tests

John is packed and ready to go!

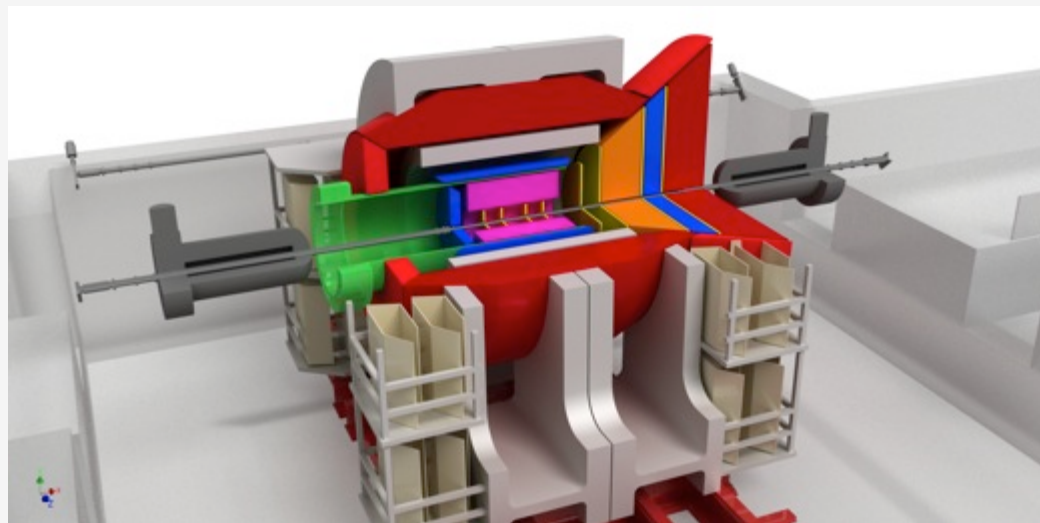




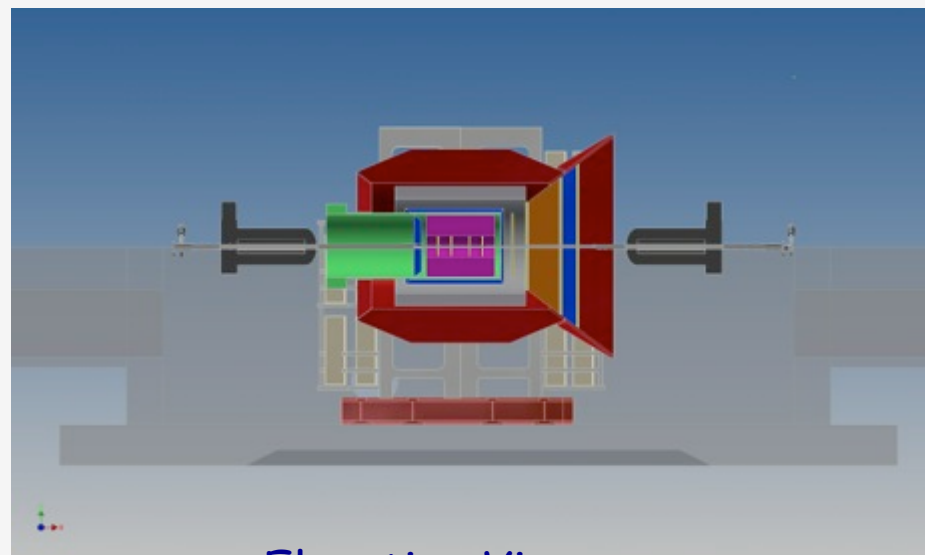
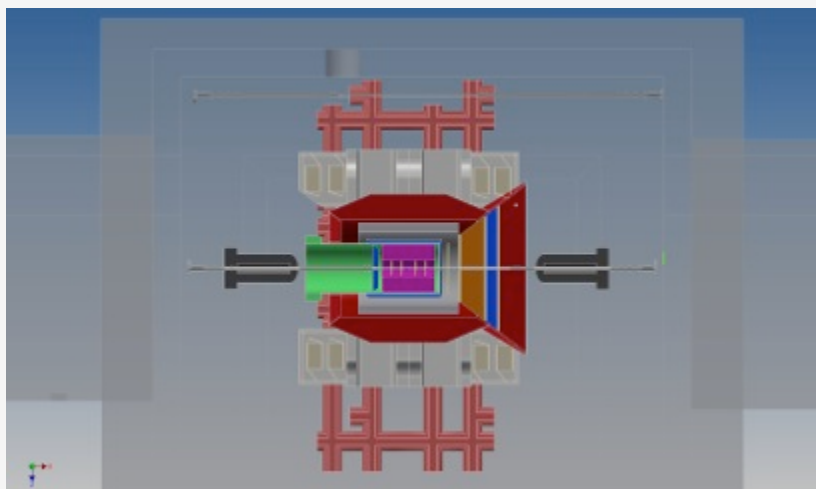
sPHENIX Modeling  
support for  
updated MIE



# ePHENIX



Plan View



Elevation View



### Alcohol Chiller Work For Shutdown 2013

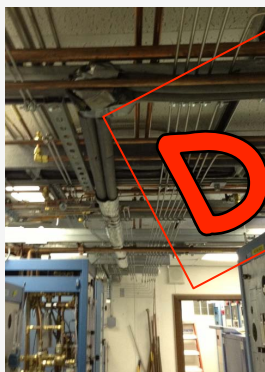


Merlin Chiller

- Chiller supplied about 1/2 the flow as in the past.
- Pressure on output was ~70-80psi
- Installed new supply line and replaced old output pressure.
- Replace chiller with spare if needed.
- Send old chiller out for maintenance or replace.

Done

### Re-Insulate Glycol lines

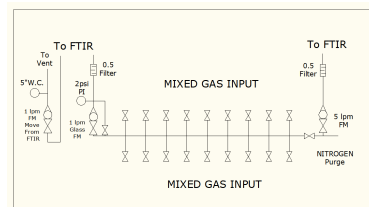


- ❖ Remove old polyethylene insulation and wrap new lines with foam rubber insulation.
- Temp of fluid is affected too much by temp change in the gas house.
- Lines are condensing and dripping because of gaps in insulation.

Done

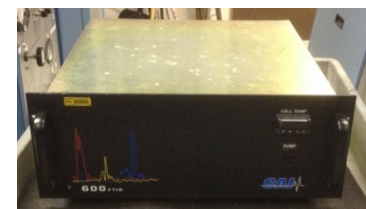
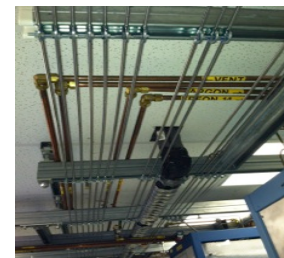
### GMH Tasks:

#### Need to complete Analyzer piping



#### Simple Manual Distribution Panel

System almost completed.  
Will be ready for run 14



## Remaining 2013 Shutdown Schedule

TECHNICAL SUPPORT NO. 14

VTX/FVTX Bias, LV and signal Cabling and Cooling distribution	Done
MPC-Ex LV, Bias and signal cabling and cooling distribution	Done
MPC-Ex installed acceptance tests	Done
Remove and stow station 1 south scaffolding	Done
Prep for EC roll in (remove fibers, cooling water and gas)	Done
Remove manlifts from IR	Done
Remove deck plates from IR	Done
Move MuID Collars into IR hold position	Done
Remove 12 ton cart from IR	Done
Roll in EC to run position	Done
Re-connect gas sniffers, water, elect., gas, fibers to EC	Done
Fold down EC platforms & reinstall dumb waiter (carpenters)	Done
Reconnect EC dumbwaiter lift wiring and TOF blowers	Done
Move MMS to run position	Done
Install the MuID collars	Done
DC West wire repairs	Done
Restore all PHENIX Elec. from shutdown safe modes to operating modes	Done
Christmas Holiday	Done
New Year's Day Holiday	Done
Assemble large shielding wall and install plug door (riggers)	Done
Start Watch Shifts	Started
sPHENIX HCal & EMCal Prototype Assembly/test	8/19-1/20/2014
Pre-run commissioning and detector prep testing for run 14	12/9-1/31/2014
Pink sheets	1/6-1/10/2014
White Sheets	1/2-1/10/2014
Blue Sheets	1/6-1/17/2014
<b>End of Shutdown Party</b>	<b>1/17/2014</b>
Start Flammable gas flow	1/21/2014 ?
Close shield wall, install radiation interlocks and prepare for run 14	1/31/2014
Start run 14	2/3/2014

## PHENIX Annual Safety Review: Action Items

- Provide a procedure to test the window washer interlocks (Lynch Jan 15, 2014)
- Add (load limit) weight postings on the new gratings covering the cables adjacent to the sill (Lynch Jan 15, 2014)
- Complete the platform gates installation (Phillips Jan 15, 2014)
- Provide the new flammable gases leak rates (Pisani, Jan 10, 2014)
- Provide the updated gas usage quantities (Pisani Jan 10, 2014)
- Add a caution sign not to overfill the NOVEC bottles (Pisani Jan 10, 2014)
- Carry out the Blue Sheeting (CAS, Phillips Feb 1, 2013)
- Document the new ethane installation and leak and pressure testing (Biggs Jan 15, 2014)
- Provide updated sweep procedures (Sampson Jan 15, 2014)
- Carry out an inspection of the installed platform gates (Cirnigliaro Feb 1, 2014)

### General:

- Update the PHENIX ECR. (Craner, Jan 15, 2014)
- Update the PHENIX work plan if necessary (Cirnigliaro Jan 15, 2014)
- Carry out a magnetic safety review (Phillips Jan 10, 2014)
- A walk through of the PHENIX detector prior to introduction of flammable gas. (Makdisi et al Jan 10, 2014)
- Update the documented work procedures. (Lynch Continuing from last year)
- Establish trained PHENIX watch shifts. (O'Brien Jan 10, 2014)

## 2014 planned Technical Support and Shutdown Activities

TECHNICAL SUPPORT 2014

Support for run 14	2/3-2/25/2014
Support for sPHENIX prototype tests at FermiLab	1/21-2/25/2014
Procure & Fabricate parts for MPC-Ex North and South	1/1/2014-6/30/2014
Assemble & test MPC-Ex South, ready for installation	3/1-7/1/2014
Assemble & test MPC-Ex North, ready for installation	7/1-9/25/2014
Start of Shutdown Tasks (purge flammable gas, disassemble and stow shield wall, remove collars, move EC to AH, Move MMS south, etc.)	7/1 - 7/18/2014
Install scaffolding in Sta 1 South	7/25/2014
Remove MPC-Ex prototype, Install new MPC-Ex South	7/28-8/22/2014
Maint. & Repairs for MPC South, BBC South, RPC1 South, MuTr sta 1 South, as necessary	7/28-8/22/2014
Remove scaffolding from sta 1 south, Move CM South	8/25/2014
Install scaffolding in Sta 1 North	8/26-8/29/2014
Prep MPC-Ex North installation area	9/1-9/26/2014
Install new MPC-Ex North	9/29-10/17/2014
Remove Sta 1 North scaffolds, Move CM North	10/20-10/24/2014
Other detector support	TBD
Infrastructure Maintenance and Improvement	TBD
Decommissioning of obsolete PHENIX detector equipment	TBD
sPHENIX Support	on-going
End of Shutdown Tasks (Move MS north, roll in EC , install collars, remove 10 ton cart, plates and manlifts, build shield wall, etc.)	10/27-11/26/2014
Pink/White/Blue Sheets	1/17/2014
End of Shutdown Party	????
Start Flammable gas flow	????
Close shield wall, install radiation interlocks and prepare for run 14	12/31/2014
Start run 15	1/2/2015



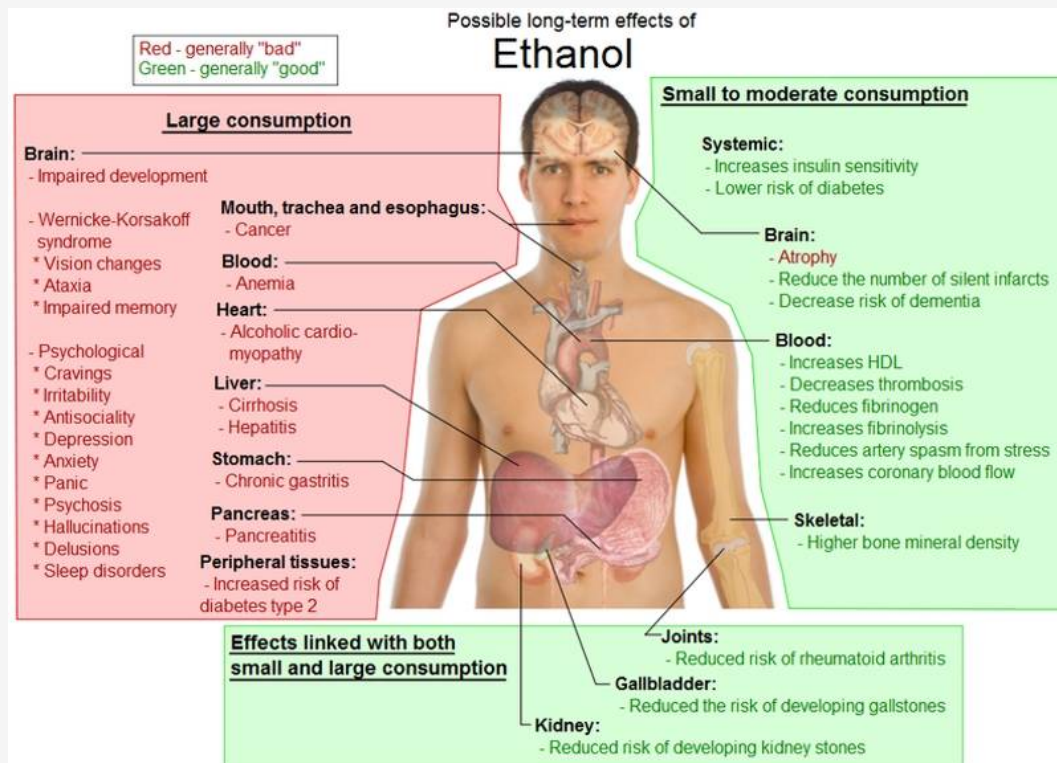
From Ray Karol:

Ring is now posted as ODH-0. Current ODH-0 or Collider User Training is required to enter any posted areas.

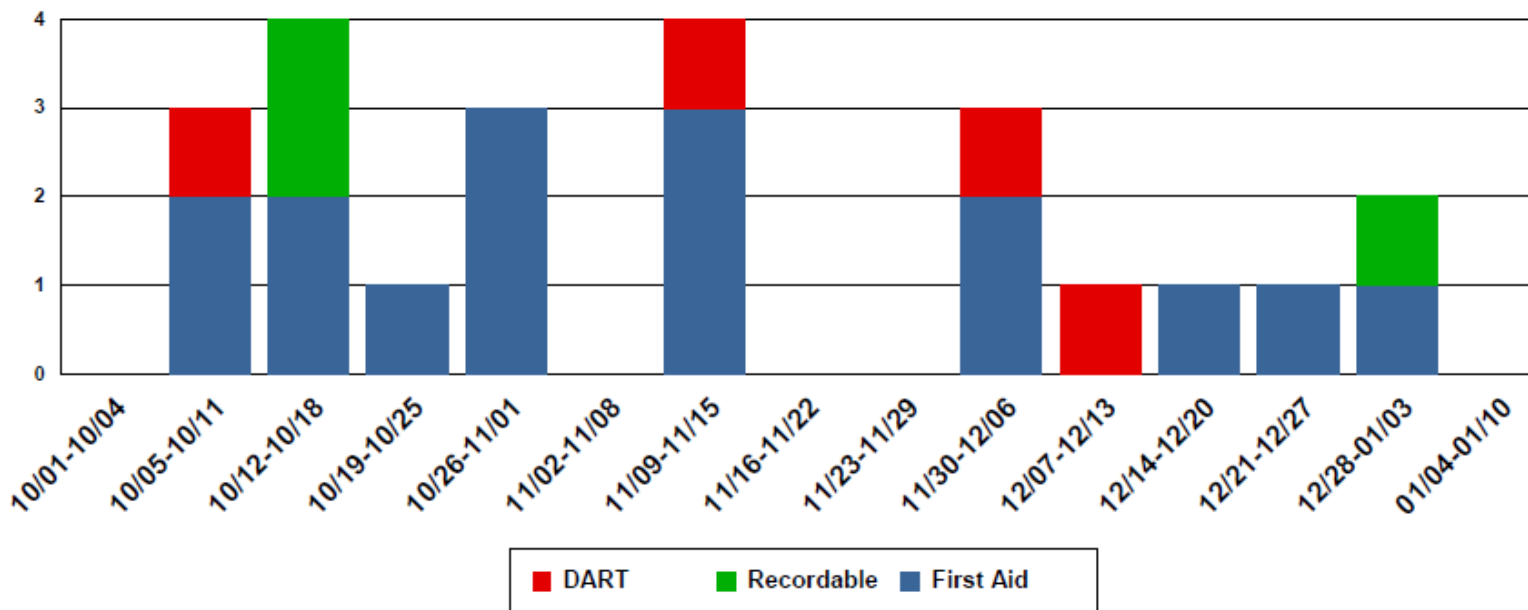
From On High:

New required "Alcohol and Substance Abuse at Work" training. All employees required to take web course by Feb. 15. ~ 3/4 hour.

(Supervisors must take 2 web courses)



**Injuries Per Week (FY)  
As of 1/6/2014**



**Injury Status:**

FY14 YTD: DART – 4, TRC – 7, First Aid – 16

FY13: DART – 14, TRC – 37, First Aid – 53

FY12: DART – 19, TRC – 38, First Aid – 69

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLInjuries.aspx>

**Recent Injuries**

1/2/14	First Aid	An employee was moving a computer server, which got caught on the ring on his left ring finger and then fell on his hand. The ring was partially deformed and had to be cut off at the OMC. His left ring finger sustained a small cut.
1/2/14	Recordable	An employee was using a razor knife to cut banding around a cardboard box when his hand slipped and cut his left forearm. A pressure bandage was affixed at the OMC and the worker was sent to the ER for sutures.

## Recent Events

12/26/13	Non-Reportable	<p>The Research Space Manager (RSM) of the CFN (Bld. 735) discovered a section of aluminum window had fallen from a 2nd floor window on the west side of the building at an unknown time in the past, and was lying in the decorative rock. The acting Facility Complex Manager and ESH Professional met with the RSM to assess the situation shortly after being notified. The area below the window was closed off with danger tape pending further investigation. It was then discovered by the Carpenters, who responded to the location to place Danger tape, that a similar section of window trim was hanging from a 2nd floor window on the east side of the building. This was also above the decorative rock bed area which is not used as a walkway. On December 27, 2013, the hanging section of window trim was removed from the east side of the building, and an extensive review was conducted on the remaining trim to determine extent of condition. The results of this review will be used to develop a plan to address these construction/design deficiencies for this facility. (<a href="#">Event Link</a>)</p>
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## Where To Find PHENIX Engineering Info



[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)

1/9/2014

